

WHAT IS CLAIMED IS:

1. A device for suturing an opening in an internal organ of a patient, comprising:

a first catheter for insertion to an opening to be sealed through a working channel of an endoscope;

a plurality of anchoring members received within the first catheter, each of the anchoring members including a shaft extending from a tissue penetrating distal tip to a suture receiving proximal end and a gripping arm moveable between an insertion configuration in which the gripping arm is folded against the shaft and a gripping configuration in which the gripping member extends away from the shaft;

a driving member extending through the first catheter to a proximal end thereof, wherein advancing the driving member distally into the first catheter advances the anchoring members distally through the first catheter to drive a distal-most one of the anchoring members out of the first catheter to anchor in tissue;

a length of suture extending between the suture receiving proximal ends of the anchor members.

2. The device according to claim 1, wherein the driving member includes a flexible piston slidably received within the first catheter and abutting a proximal end of a proximal-most one of the anchoring members.

3. The device according to claim 1, wherein the gripping member is

biased toward the gripping configuration and is maintained in the insertion configuration by an inner wall of the first catheter.

4. The device according to claim 1, wherein the anchoring members abut one another within the first catheter.

5. The device according to claim 1, wherein an end of the length of suture is fixed to a distal-most one of the anchoring members.

6. The device according to claim 1, further including a contact pressure mechanism which releases the gripping arm from the insertion configuration upon penetration of tissue of the distal tip of the corresponding anchoring member.

7. The device according to claim 6, wherein a distal portion of the first insertion catheter includes a first hinge formed a predetermined distance from a distal end thereof and a second hinge formed proximally of the first hinge so that, when the distal end of the first catheter contacts the tissue, the distal portion of the first catheter folds into a radially expanded configuration.

8. The device according to claim 7, wherein the distal portion of the first catheter includes a third hinge formed distally of the first hinge so that, when the distal portion of the first catheter is folded into the radially expanded configuration, the distal end of the first catheter abuts the gripping arm of the distal-most one of the anchoring members to retain the gripping arm in the insertion configuration until a proximal end of the gripping arm passes distally beyond the distal end of the first catheter.

9. The device according to claim 1, further comprising a second

catheter slidably received within the first catheter, wherein the anchoring members are received within the second catheter.

10. The device according to claim 9, wherein the driving member is slidably received within the second catheter.

11. The device according to claim 1, wherein the driving member includes a knot holding section and a suture cutting surface.

12. The device according to claim 11, wherein the driving member includes a lumen extending therethrough and wherein the suture extends through the lumen to a proximal end of the device.

13. The device according to claim 9, wherein the second catheter selectively couples to a distal-most one of the anchoring members so that, after the anchoring member has been embedded in tissue, the user may release the anchoring member from the second catheter.

14. The device according to claim 11, wherein the knot holding section includes a suture holding pin which, in a suture holding configuration, protrudes from the driving member and, in a suture release configuration, is withdrawn into the driving member.

15. A system for suturing an opening within a body, comprising:

an endoscope including a working channel extending therethrough;

a first catheter slidably received within the working channel;

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a second catheter slidably received within the first catheter and including a plurality of anchoring members slidably received therein, wherein the anchoring members include projecting members for maintaining the anchoring members in desired positions in tissue, the projecting members being in a retracted state while received within the second catheter;

a third catheter slidably received within the second catheter and extending from a proximal end of the endoscope to a proximal end of a proximal-most one of the anchoring members; and

a length of suture extending between the anchoring members.

16. The system according to claim 15, wherein the first catheter includes a contact pressure mechanism which retains the projecting members in the retracted state until they are deployed in tissue.

17. The system according to claim 16, wherein the contact pressure mechanism includes a folding portion of the first catheter which, when pushed against tissue, collapses axially into a radially expanded configuration with a holding surface abutting at least one projecting member of a distal-most one of the anchoring members to maintain the projecting member in the retracted state while in contact therewith.